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PHOTOGRAPHIC INTERPRETATION REPORT



**COMPARATIVE ANALYSIS
OF SOVIET H-CLASS SSBNs
OBSERVED ON
KEYHOLE PHOTOGRAPHY**



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COMPARATIVE ANALYSIS OF SOVIET H-CLASS SSBNs OBSERVED ON KEYHOLE PHOTOGRAPHY

This report is in response to USIB Requirement No 71-5 for a comparative analysis of Soviet H-class SSBNs observed on KEYHOLE photography.

Photography of H-class SSBNs with well-defined end points is limited to 3 sightings: Severodvinsk, Strelak Strait Pavlovskogo, and Sayda Guba (Figure 1).

The probable H-class SSBN observed at Severodvinsk (Figure 2) was reported in NPIC/R-786/64 as an "Unidentified SS, approximately 410 feet visible overall and apparently partially canvas covered at one end, in floating drydock

within the flooded basin in front of covered building way."

Analysis of material derived from the original negative (on which the bow is imaged more clearly) and ephemeris data reveal that this vessel measures approximately 390 feet in length overall (LOA) and has a sail approximately 90 feet long located approximately 100 feet from the bow (Figure 3).

The H-class SSBNs observed at Strelak Strait Pavlovskogo (Figure 4), underway near Sayda Guba (Figure 5), and at the Sayda Guba piers (Figure 6) have identical dimensions and

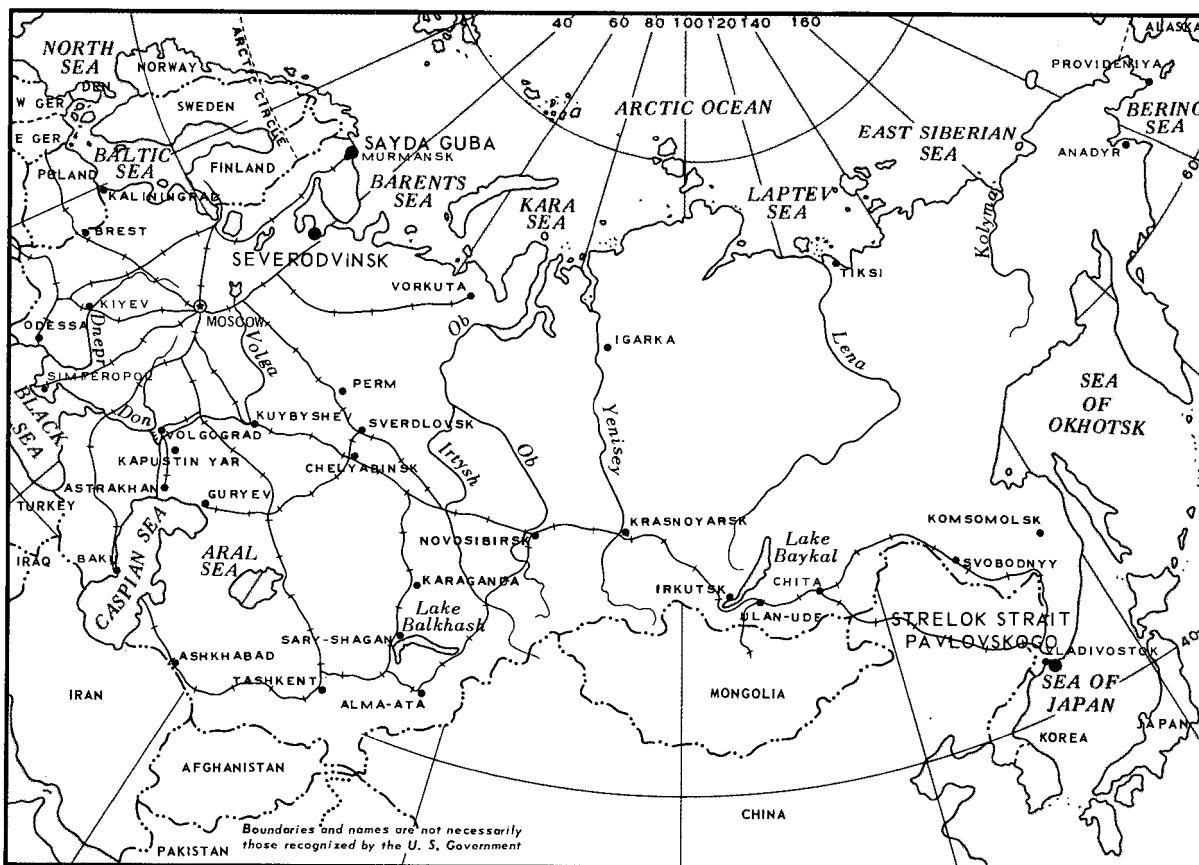


FIGURE 1. LOCATION OF SEVERODVINSK, STRELAK STRAIT PAVLOVSKOGO, AND SAYDA GUBA, USSR.

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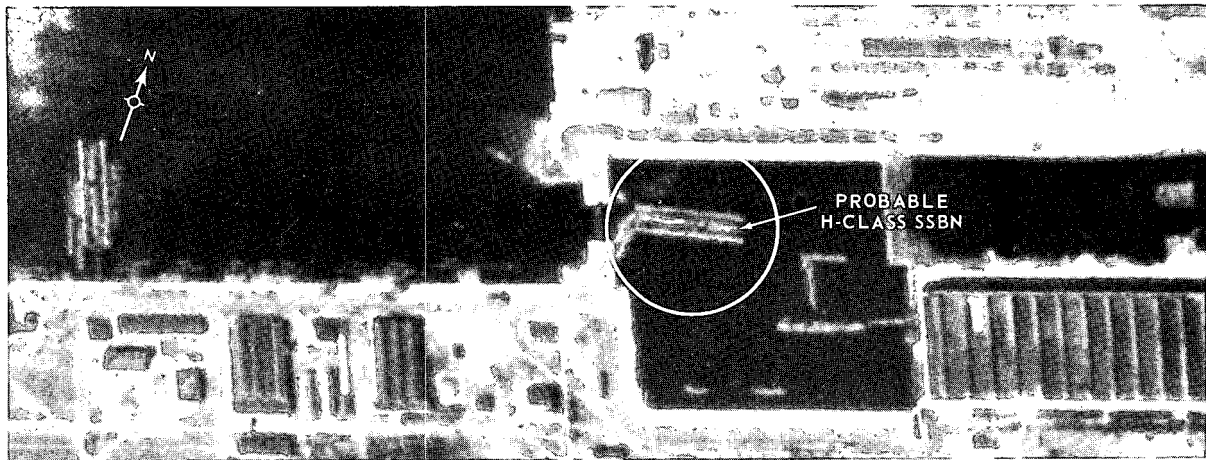


FIGURE 2. PROBABLE H-CLASS SSBN IN A FLOATING DRYDOCK AT SEVERODVINSK, AUGUST 1964.

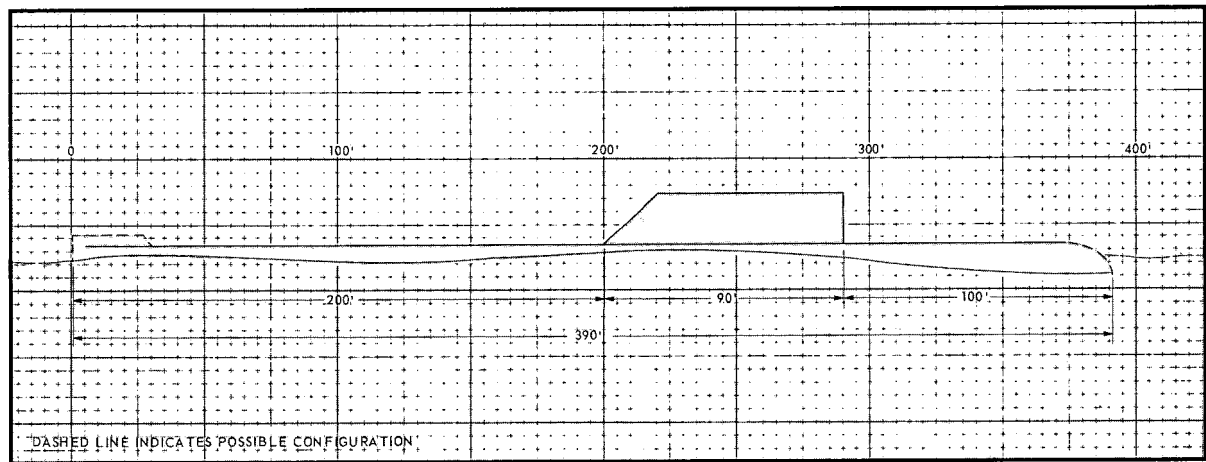


FIGURE 3. PROVISIONAL DRAWING OF PROBABLE H-CLASS SSBN AT SEVERODVINSK.

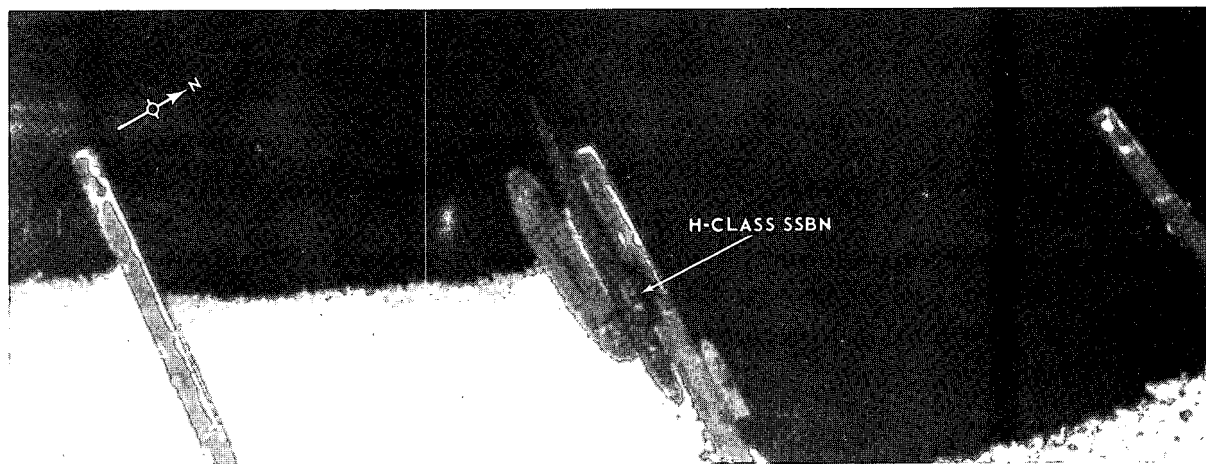


FIGURE 4. H-CLASS SSBN AT STRELOK STRAIT PAVLOVSKOGO, MARCH 1965.

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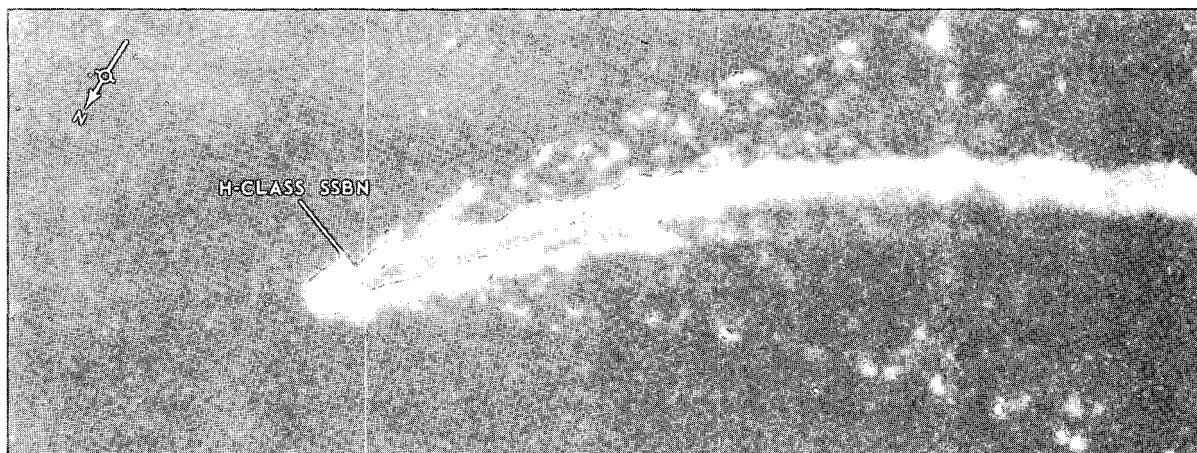


FIGURE 5. H-CLASS SSBN UNDERWAY NEAR SAYDA GUBA, MARCH 1965.



FIGURE 6. PROBABLE H-CLASS SSBNs AT SAYDA GUBA, MARCH 1965.

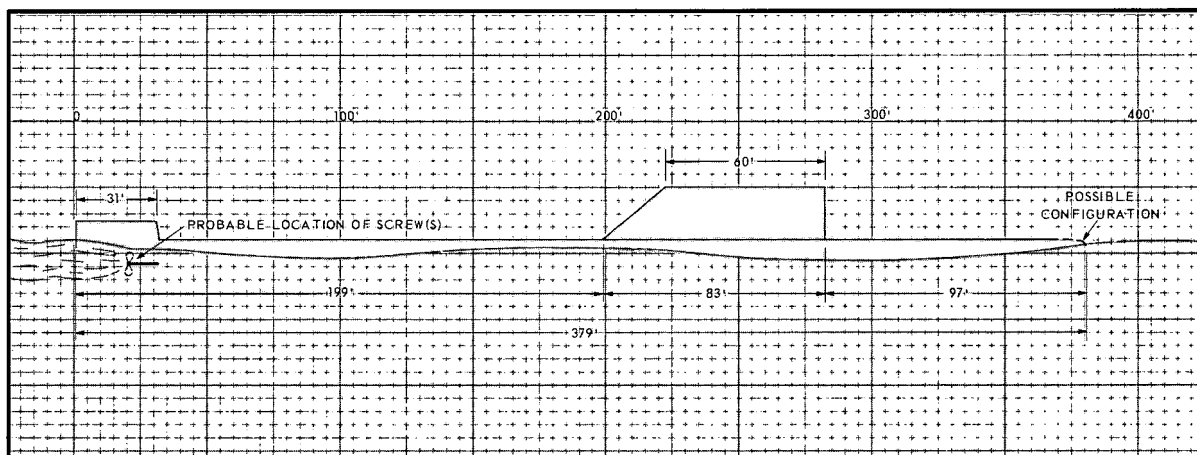


FIGURE 7. PROVISIONAL DRAWING OF H-CLASS SSBNs OBSERVED AT STRELOK STRAIT AND SAYDA GUBA.

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proportions (Figure 7). All 4 of these vessels are therefore considered H-class SSBNs. Each measures [] LOA and each has an [] sail located [] from the visible bow. The stern fin [] and the probable screw(s) is 20 feet from the apparent stern. The top of sail structure measures 60 feet in length.

The out-of-water values of the probable H-class SSBN observed at Severodvinsk may be identical to the out-of-water values of the SSBNs with bulbous bows subsequently observed under conditions of operational draft. The discrepancy [] in LOA (apparently forward from the aft end of the sail) may be the result of a difference in the photographic quality of the 2 camera systems. Mensural values of the sub-

marine at Severodvinsk are from KH-4 photography and may be considered accurate to within plus or minus 10 feet. Mensural values of the submarines at Strelak Strait Pavlovskogo and Sayda Guba are from KH-7 photography and may

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The paucity of reliable scaling data and extreme obliquity of the KH-7 photography preclude determination of meaningful scaling values. Consequently, all values in this report are based on ephemeris information. However, using the maximum possible photo distance to represent a Bolva-class APL at Sayda Guba, it was determined by scaling that neither of the 2 probable H-class SSBNs berthed at the piers was less than []

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REFERENCES

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DOCUMENTS

NPIC. R-786/64, *Oak - Part II, Mission 1009-1, 6-9 August 1964*, Aug 64 (TOP SECRET CHESS RUFF)

NPIC. [] *Mensural Characteristics of Soviet Nuclear Submarines*, Feb 65 (TOP SECRET RUFF)

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REQUIREMENT

USIB 71-5

NPIC PROJECT

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